FORM 4	4
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Check this box if no	Ī
longer subject to	
Section 16. Form 4 or	•
Form 5 obligations	
may continue. See	
Instruction 1(b).	

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)		1									
1. Name and Address of Reporting Pe Higgins Bren D.	2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]						5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner				
(Last) (First) C/O KLA-TENCOR CORPOR TECHNOLOGY DRIVE	3. Date of Earliest Transaction (Month/Day/Year) 08/31/2017						XOfficer (give title below) Other (specify below) EVP & Chief Financial Officer				
(Street) MILPITAS, CA 95035	4. If Amendment, Date Original Filed(Month/Day/Year)						6. Individual or Joint/Group Filing(Check Applicable Line) _X_Form filed by One Reporting Person Form filed by More than One Reporting Person				
(City) (State)	(Zip)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned									
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	(Instr. 8)			(A) or		5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	Form: Direct (D)	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
Common Stock - Restricted Stock Units (1)	08/31/2017		A	v	10,705 (2)	· · /	\$ 0	76,506 <u>(3)</u>	D		
Common Stock - Restricted Stock Units (1)	08/31/2017		М		5,353 (<u>4</u>)	D	\$ 0	71,153 (3)	D		
Common Stock	08/31/2017		М		5,353 (<u>4</u>)	А	\$0	6,207	D		
Common Stock	08/31/2017		F		2,793 (5)	D	\$ 93.69	3,414	D		

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SEC 1474 (9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned

(<i>e.g.</i> , puts, calls, warrants, options, convertible securities)															
1. Title of	2.	3. Transaction	3A. Deemed	4.		5.		6. Date Exer	cisable	7. Tit	le and	8. Price of	9. Number of	10.	11. Nature
Derivative	Conversion	Date	Execution Date, if	Transactio	on	Num	ber	and Expiration Date		Amount of Deriv		Derivative	Derivative	Ownership	of Indirect
Security	or Exercise	(Month/Day/Year)	any	Code		of		(Month/Day	/Year)	Unde	rlying	Security	Securities	Form of	Beneficial
(Instr. 3)	Price of		(Month/Day/Year)	(Instr. 8)		Deriv	vative	ative		Securities (Instr. 5)		Beneficially	Derivative	Ownership	
	Derivative					Secu		ties		(Instr. 3 and			Owned	Security:	(Instr. 4)
	Security						cquired		4)			U	Direct (D)		
							(A) or					1	or Indirect		
						Disposed						Transaction(s)	· /		
						· ·	f (D)						(Instr. 4)	(Instr. 4)	
						(Instr									
						4, and	15))			1				
											Amount				
								Date	Expiration		or				
								Exercisable	1	Title	Number				
								Literensuore	2		of				
				Code	V	(A)	(D)				Shares				

Reporting Owners

			Relationships	
Reporting Owner Name / Address	Director	10% Owner	Officer	Other
Higgins Bren D. C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035			EVP & Chief Financial Officer	

Signatures

Teri A. Little as Attorney-in-Fact for Bren D. Higgins	
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**Signature of Reporting Person

09/05/2017 Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock.

On August 7, 2014, in addition to the RSUs granted on that date that were subject only to service-vesting requirements (which RSUs were previously reported on Form 4), (2) the Reporting Person was also granted RSUs covering up to a maximum of 11,437 shares (based on 125% of the target shares of 9,150) of KLA-Tencor common stock, subject to both performance-vesting and service-vesting requirements. On August 31, 2017 the Compensation Committee of KLA-Tencor's Board of Directors determined

- (3) Does not include performance-based RSUs, if any, held by the Reporting Person for which an assessment has not yet been made regarding the achievement of the applicable
- (3) performance goals. Any such holdings will be reported on a Form 4 within two business days of the date such assessment is made. The Reporting Person vested fifty percent (50%) of the performance-based RSUs upon the date on which the Compensation Committee of KLA-Tencor's Board of Directors
 (4) determined the level at which the underlying performance goals were attained (August 31, 2017) and will vest in the remaining fifty percent (50%) upon his completion of

four years of service following the grant date of the award (August 7, 2014). The shares of common stock will be issued as the performance-based RSUs vest.

Pursuant to the terms of the grant, shares of KLA-Tencor common stock were automatically withheld at vesting to cover required tax withholding. The fair market value of (5) KLA-Tencor common stock used for purposes of calculating the number of shares to be withheld was the closing price of KLA-Tencor common stock as reported on August 31, 2017.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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